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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,304	10/31/2003	Robert Preston Parker	02103-531001/AABOSW07	3923
26162	7590	03/18/2008		
FISH & RICHARDSON PC			EXAMINER	
P.O. BOX 1022			DABNEY, PHYLESHA LARVINIA	
MINNEAPOLIS, MN 55440-1022				
			ART UNIT	PAPER NUMBER
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			03/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/699,304

Applicant(s)

PARKER ET AL.

Examiner

PHYLESHA L. DABNEY

Art Unit

2614

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-416 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

This action is in response to the Response to Election/Restriction received on 11 February 2008 in which claims 17-24 are pending, and claims 1-16 and 25-26 were withdrawn.

Election/Restrictions

1. Applicant's election without traverse of Species II (claims 17-24) in the reply filed on 27 July 2004 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **17-19** and **21-23** are rejected under 35 U.S.C. 102(b) as being anticipated by Henricksen et al (U.S. Patent No. 4,811,403).

Regarding claims 17-18, Henricksen teaches an electroacoustical device for operating in an ambient environment comprising: an acoustic enclosure (figs. 4-5) comprising a port (92) having an exit for radiating pressure waves; an electroacoustical transducer (98) positioned in said acoustic enclosure, said electroacoustical transducer for vibrating to produce said pressure waves; a second enclosure having a first opening (110) and a second opening (112); wherein said port exit (92) is positioned near said first opening (110) so that said pressure waves are radiated

into said second enclosure through said first opening (col. 9 lines 18-24), and wherein said port exit, said first opening, and said enclosure are constructed and arranged to cause air (col. 9 lines 18-24) from said ambient environment to flow into said second enclosure through said first opening; a mounting position (opposite side of 94 relative to 98 thereby lying within air flow path, col. 9 lines 10-38) for a heat producing device (amplifier, col. 9 lines 35-38) in said second enclosure positioned so that air flowing into said second enclosure through first opening from said ambient environment flows across said mounting position.

Regarding claim 19, Henricksen teaches an electroacoustical device in accordance with claim 18 wherein said heat producing element is an audio amplifier (amplifier, col. 9 lines 35-38).

Regarding claims 21-22, Henricksen teaches an electroacoustical device for operating in an ambient environment comprising: an acoustic enclosure comprising a port (110) having an exit for radiating pressure waves; an electroacoustical transducer (98) positioned in said acoustic enclosure, said electroacoustical transducer for vibrating to provide said pressure waves; an elongated second enclosure (near 94, 118) having a first extremity and a second extremity in a direction of elongation; a first opening (94, 112) at said first extremity and a second opening (106, 118) at said second extremity; wherein said port exit (110) is positioned in said first opening so that said pressure waves are radiated into said second enclosure through said first opening toward said second opening; and a mounting position (opposite side of 94 relative to 98 thereby lying within air flow path, col. 9 lines 10-38) for a heat producing device (amplifier, col.

9 lines 35-38) in said elongated second enclosure positioned so that air flowing into said opening from said ambient environment flows across said mounting position.

Regarding claim 23, Henricksen teaches an electroacoustical device in accordance with claim 22 wherein said heat producing element is an audio amplifier (amplifier, col. 9 lines 35-38).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **20** and **24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Henricksen.

Regarding claims 20 and 24, Henricksen teaches an electro-acoustical device, comprising: a first enclosure comprising a port (92) having a terminal point; an electroacoustical transducer (98) comprising a vibrating surface for generating pressure waves resulting in said outward airflow and said inward airflow; a second enclosure comprising a first opening (110) and a second opening (112), wherein the port terminal point is positioned near said first opening and oriented so that said port terminal outward flow flows toward said second opening and wherein said port and said electroacoustical transducer coact to cause a substantially unidirectional airflow to flow into said first opening.

Although Henricksen teaches the electroacoustic device could use any passive/active heating dissipating means (col. 6 lines 40-50), Henricksen fails to specifically teach the heat dissipating means utilizing the terminal point for outward and inward airflow to flow into/out of the first enclosure. However, the Examiner takes Official notice that it is known to use various heating dissipating means, such as fins, passive radiators, thermal conductive material, in acoustic enclosure device to create unidirectional airflow without using additional heat producing elements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any known heating dissipating means in the invention of Henricksen for the reason stated above.

Response to Arguments

4. Applicant's arguments filed have been fully considered but they are not persuasive.

With respect to the Applicant's argument relative to claim 17 that Henricksen fails to teach *the port exit, the first opening, and the enclosure constructed and arranged to cause air from the ambient environment to flow in to the second enclosure through the first opening*, the Examiner disagrees.

Henricksen clearly teaches the air flow pattern between the port exit, first opening and the enclosure as traveling between the ambient environment and the second enclosure (fig. 5). In Figure 5, a fan is being used to control the flow of air; however, the placement (construction and arrangement) of the port exit, first opening, heat dissipated from the magnetic assembly onto the specifically designed load bearing member (col. 5 line 62 through col. 6 line 50) causes the air to

travel out through the second enclosure. The fan is optional to the design (col. 4 lines 21-24; col. 6 lines 40-50), or interchangeable with other types of air flow control means (different types are listed below under conclusion, also cited in the previous office action). Furthermore, the Applicant's claimed invention is not restricted such that other elements, i.e. fan, could not be present. Therefore, the rejection is maintained.

5. With respect to the Applicant's argument pertaining to claim 20 and 24 that Henricksen fails to teach *the port and the electroacoustical transducer coact to cause a substantially unidirectional airflow to flow into the first opening*, this is an inherent feature of conical electroacoustic systems. Furthermore, one of ordinary skill in the art would know that a conical speaker provides a push-pull reaction to the air flowing within the enclosure. In addition, Henricksen teaches the vent means providing air circulation into the enclosure (col. 4 lines 45-48) which must be coacting with the notoriously well know push-pull reaction of conical speakers or else how/why would air flow into the enclosure. Therefore, the rejection is maintained.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References that teach heat dissipation means: 4875546; 3991286; 4138593; 4210778; 6956956; 7103193.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHYLESHA L. DABNEY whose telephone number is (571)272-7494. The examiner can normally be reached on Mondays, Wednesdays, Fridays 8:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
P O Box 1450
Alexandria, VA 22313-1450

Or faxed to:
(703) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 10, 2008

PLD

//Curtis Kuntz//
Supervisory Patent Examiner, Art Unit